

running parallel to the length of the trough so that the halves would form an upper and a lower half.

Figure 5 also illustrates an optional embodiment for the shape of the upper half of the trough. In figs. 1, 3 and 4 the top of the trough is shown as a "V" shape. In fig. 5 a "U" shaped type of indentation 20 is shown in the upper half of the trough. This "U" shape indentation may be used with those other embodiments shown in this application aside from the "V" shaped versions, that is, the "U" shape is not limited to use only with the hinged embodiment.

A²
In the hinged embodiment, the upper half of the trough would be hinged to the lower half so that the U shape would be at the top of the upper half. The trough may be constructed in sections to facilitate the movement of the upper and lower halves. The use of the hinged connection would allow the halves to be separated from one another along the length for easier cleaning of the inside of the trough. The use of the hinge would also enable the user to tilt the upper half to one side (as shown) in order to empty the contents (which may include rain) of the external surface the U shape, i.e. that surface that is outside the trough and exposed to the elements, this in distinction to the internal surface.

The trough can also be constructed as an elevated trough 28 in fig. 5. An extended portion 26 would extend upward from the bottom of the trough in order to support the trough at distance above the lower surface 26. Again, this embodiment can be used with any of the other embodiments shown in the invention and does not have to be used only with the hinged construction.

Insert the following on page 6, line 34:

25 Sept. 1997

incorporated in sub-spec

A3 Photochromic enhancement may be very desirable for chemical separations, such as the removal of gasoline from water. The photochromic properties would be desirable to achieve an optimum temperature that would maximize the volatilization and the condensation of the gasoline components while minimizing the volatilization and condensation of water. Prior art methods do not employ the use of photochromic properties.--

[] Insert the following on page 7, line 39:

incorporated in sub-spec

A4 --Among the advantages of using a tubular design similar to a pipe for the distillation device is that large amounts of liquids can be purified using the pipe for a continuous type of process with unpurified liquid continually being fed at the beginning of the pipe and the purified batch coming out of the other end. Distillation and transport of the liquid can occur at the same time in such a process. Prior art devices that utilize a simple container do not have the advantage of being able to be used in a continuous process.

Branched tubes shown in fig. 6 and 7 can be used to divide the flow of liquid and divert it to more than one location during the purification process. In both examples; this version of the tube would have a pair of side troughs running down each side of the tube e.g. the version shown in fig. 2. One of the side troughs will branch to the left and one to the right at these "T" shaped branched portions. Further branching of each branch can be used to provide purified liquid to a variety of locations. π

In the claims:

Cancel previous claims and add the following claims:

at 25 Sept. 1997